

CLAIMS

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Regi
- 5 1. A method of assaying for an analyte which method comprises the steps of:
- 10 i) mixing a sample of cells possibly containing the analyte with a cell lysis reagent to provide a cell lysis fluid,
- ii) mixing the cell lysis fluid with reagents, including a specific binding partner of the analyte for binding to the analyte, for performing a specific binding assay for the analyte,
- 15 iii) and mixing the cell lysis fluid with a sequestrant for the cell lysis reagent, whereby the binding of step ii) is performed in the presence of the sequestrant.
2. A method as claimed in claim 1, wherein the cell lysis reagent is a detergent.
3. A method as claimed in claim 1, wherein the sequestrant is a cyclodextrin.
4. A method as claimed in claim 3, wherein the amount of
- 20 sequestrant is in the range of 1 - 5% of the binding reaction mixture.
5. A method as claimed in claim 1, wherein steps i), ii) and iii) are all performed in a single reaction vessel.
6. A method as claimed in claim 1, wherein multiple assays are performed in parallel in wells of a multiwell plate.
- 25 7. A method as claimed in claim 1, wherein the cells are cultured in a vessel and are lysed in that vessel for assaying the analyte in that vessel.
8. A method as claimed in claim 1, wherein the assay of step ii) is a homogenous assay.
- 30 9. A method as claimed in claim 1, wherein the assay of step ii) is a scintillation proximity assay.

10. A method as claimed in claim 1, wherein the specific binding assay of step ii) is an immunoassay.

11. A method as claimed in claim 1, wherein the analyte is adenosine-3',5'-cyclic monophosphate, the cell lysis reagent is dodecyl trimethyl ammonium bromide and the sequestrant is  $\alpha$ -cyclodextrin.

12. A method as claimed in claim 1, wherein the cells have been maintained in a culture medium, and step i) is performed in the presence of the culture medium.

13. A method as claimed in claim 1, wherein the intracellular or the total (intracellular plus extracellular) concentration is measured of an analyte selected from adenosine-3',5'-cyclic monophosphate, interleukin-6 and prostaglandin E<sub>2</sub>.

14. A kit, suitable for assaying for an analyte by the method as claimed in claim 1, comprising: a detergent; a sequestrant for the detergent; a specific binding partner of the analyte; a tracer; and separation means for separating bound tracer from unbound tracer.

add B3 G1

add B3 G1

add A<sup>3</sup>

add B<sup>4</sup>

add G<sup>1</sup>

add B<sup>3</sup>